

GENERAL NPDES PERMIT FOR PESTICIDE RESIDUE
DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER NO. 2011-XXXX-DWQ
NPDES NO. CAGXXXXXX

ATTACHMENT G – NOTICE OF INTENT

RECEIVED

MAR 15 2011

DIVISION OF WATER QUALITY

WATER QUALITY ORDER NO. 2011-XXXX-DWQ
GENERAL PERMIT NO. CAG XXXXXX

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES
FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item, ☒ A. New Applicator ☐ B. Change of Information: WDID# _____
☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Shasta Mosquito and Vector Control District			
B. Mailing Address 19200 Latona Rd			
C. City Anderson	D. County Shasta	E. State CA	F. Zip Code 96007
G. Contact Person Peter Bonkrude	H. Email address contact@shastamosquito.org	I. Title District Manager	J. Phone 530-365-3768

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

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IV. RECEIVING WATER INFORMATION

A. Pesticide residues discharge to (check all that apply)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
☐ Name of the conveyance system: _____
2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
☒ Owner's name: Anderson-Cottonwood Irrigation District
Name of the conveyance system: ACID
3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: Reference Shasta Mosquito BMP document for District Map

* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 5
(List all regions where pesticide application is proposed.)

V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: ☒ Vector Larvae ☒ Adult Vector

B. Pesticides Used: List Name and Active Ingredients Please reference Shasta Pesticide Application Plan

C. Period of Application: Start Date N/A **End Date** N/A

D. Types of Adjuvants Added by the Discharger:

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*

☒ Yes ☐ No

If not, when will it be prepared? _____

* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

☒ Yes ☐ No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

☐ Yes ☒ No

* If yes, a copy of the notifications shall be attached to the NOI.

TENTATIVE ORDER

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VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☒ Yes ☐ NO ☐ NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Peter Bonkrude

B. Signature: 

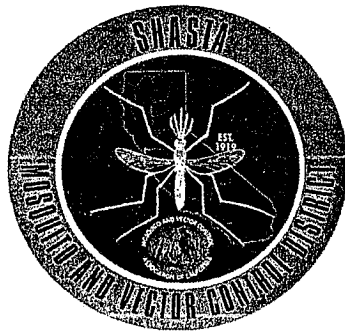
Date: 3/2/2011

C. Title: District Manager

X. FOR STATE WATER BOARD USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:

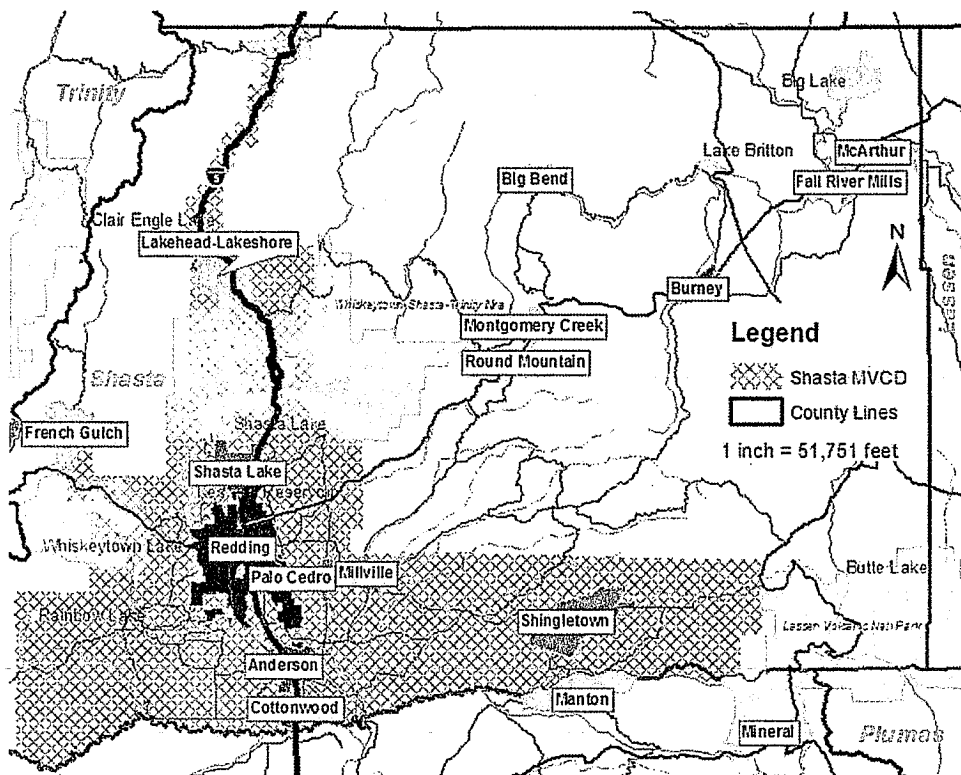
INTENTATIVE ORDER



Shasta Mosquito and Vector Control Pesticide Application Plan

The NPDES Permit requires a Pesticides Application Plan (PAP) that contains the following elements:

- a. Description of the target area and adjacent areas, if different from the water body of the target area;



The District boundaries extend from Castella on the north to Cottonwood Creek on the south and from the town of French Gulch on the west to Viola on the east.

- b. Discussion of the factors influencing the decision to select pesticide applications for mosquito control;

Please see the Best Management Practices for Mosquito Control in California

- c. **Type(s) of pesticides used, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**

Please see the Best Management Practices for Mosquito Control in California

- d. **Description of the types and locations of the anticipated application area* and the target area to be treated by the Discharger, recognizing that, with vector control, the precise locations may not be known until after surveillance;**

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this District include:

Agricultural

Pastures:

Irrigated and non-irrigated fields used for the purpose of raising livestock.

Stock Ponds:

Artificially constructed ponds to catch and hold runoff water used for stock watering or irrigation.

Agricultural drains:

Ditches used for draining excess water from agricultural operations.

Return Sumps:

Holding ponds used to collect excess agricultural water for return to fields or disposal to another source.

Watering troughs:

Tanks, troughs, or other containers used for watering stock.

Tail Water:

Water left in low portions of an agricultural field from irrigation.

Natural

Creeks:

Natural, or slightly modified main channels of creeks.

Creek Isolations:

Isolations holding water that are separated from the main creek channel.

Marshes:

Shallow marshy areas, artificial or natural with emergent vegetation.

Lakes (20 acres+):

Natural or artificial bodies of water, usually deeper than 20 feet.

Ponds (less than 20 acres):

Natural or artificial bodies of water, usually shallower than 20 feet.

Treeholes:

Rot cavities or cavities caused by tree growth.

Temporary pools (Storm water):

Areas that collect rain water or in domestic areas occasionally collect irrigation water.

Temporary pools (Vernal Pools):

Seasonal depression wetlands. They are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall.

Domestic

Stock Ponds:

Artificially constructed ponds to catch and hold runoff water used for stock watering or irrigation.

Fish Ponds:

Artificially constructed landscape ponds for fish or accent.

Septic tanks:

Underground storage and processing tanks for sewage.

Wells: Drilled or dug wells for water, usually old and no longer used.

Swimming Pools/Hot Tubs: In ground or above ground neglected swimming pools

Bird Baths: Small pools or ornamental structures for bird bathing.

Cesspools: Open collection ponds for sewage (not legal)

Domestic Container: Any container-bucket, tub, boat, barrel, wheelbarrow, etc. found in a yard and containing water.

Commercial

Catch basins, gutters: Basins or gutters used to collect and direct runoff water. Found in streets, parking lots, loading docks or private driveways.

Storm drains: Underground structures for carrying runoff water.

Gravel pits: Pond or pit created to mine gravel.

Borrow pit: Pits or depressions created to obtain soil for construction. Usually found along railroad tracks, or occasionally buildings.

Sewer ponds/treatment plants: Ponds and water holding structures used for sewage treatment.

Utility vaults: Underground structures for utilities; PG&E, water departments, telephone, REU or private.

Cemetery urns: Containers provided for flowers at grave sites.

Sumps: Holding ponds or structures for collecting industrial waste water or runoff.

Sewer lines: Underground structures for collecting and carrying sewage.

Log Mill Ponds: Ponds/Ditches created by sprinklers being utilized over the log decks to keep the lumber from drying out.

Channel (lined): Channels lined with rock or concrete used for flood control or to collect runoff.

Channel (unlined): Channels with soil bottoms and sides used for flood control or to collect runoff.

Waste water marsh: Marsh constructed to hold or treat waste water, usually sewage.

Tires: Stored or discarded tires.

Broken or Leaking pipes: Water sources created by broken or leaking pipes.

Seepage: Water sources created by seepage from natural or unknown sources.

e. Other control methods used (alternatives) and their limitations;

With any mosquito or other vector source, the District's first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential.

The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Please refer to Shasta Mosquito and Vector Control Best Management Practices Document for alternatives.

- f. Approximately how much product is anticipated to be used and how this amount was determined

Determined through past year's use.

Registration Number	Product Name	Amount
2724-448	Zoecon Altosid Pellets	4000 lbs
2724-375	Zoecon Altosid Briquets	400 briquets
2724-421	Zoecon Altosid XR Extended Release Briquets	1500 briquets
2724-392	Zoeson Altosid Liquid Larvicide	4 gallons
8329-72	Mosquito Larvicide GB-1111	100 gallons
73049-10	Vectobac G	350 lbs
73049-57	Vectolex WDG	35 lbs
73049-429	VectoMax CG	3000 lbs
73049-38	Vectobac 12AS	15 gallons
70589-1	BVA 2 Mosquito Larvicide Oil	100 gallons
73049-20	Vectolex CG	600 lbs
8329-70	5% Skeeter Abate	250 lbs
1021-1688	Anvil 10 + 10 ULV	700 gallons
1021-1795	Duet Dual-Action Adulticide	250 gallons
67760-34	Fyfanon ULV Mosquito	25 gallons
432-1050	Pyrenone 25-5 Public Health Insecticide	10 gallons
2724-791	Zenivex E20	100 gallons
8329-80	Natular G	600lbs
8329-84	Natular XRT	1000 tablets
83362-3	Fourstar Briquets	2000 briquets

- g. Representative monitoring locations* and the justification for selecting these monitoring locations

Please see the MVCAC NPDES Coalition Monitoring Plan

- h. Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts; and

Please see the Best Management Practices for Mosquito Control in California

- i. Description of the BMPs to be implemented

Please see the Best Management Practices for Mosquito Control in California

2. The Discharger shall update the PAP periodically and submit the revised PAP to the State Water Board for approval if there are any changes to the original PAP.

D. Best Management Practices (BMPs)

The Discharger shall develop BMPs that contain the following elements:

The District's BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

1. Identify the Problem

Prior to first pesticide application covered under this General Permit that will result in a discharge of residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:

a. Establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies

Only those mosquito sources that District staff determine to represent imminent threats to public health or quality of life are treated. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;

Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

c. Identify known breeding areas for source reduction, larval control program, and habitat management; and

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to implement long-term solutions to reduce or eliminate the need for

continued applications as described in Best Management Practices for Mosquito Control in California.

- d. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**

This is included in the Best Management Practices for Mosquito Control in California and the Shasta Mosquito and Vector Control Best Management Practices Document.

2. Examine the Possibility of Alternatives to Treatments

Dischargers should continue to examine the possibility of alternatives to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:

- a. Evaluating management and treatment options that may impact water quality, non-target organisms, vector resistance, feasibility, and cost effectiveness, such as:**
 - No action
 - Source prevention
 - Mechanical or physical source reduction methods
 - Cultural methods
 - Biological control agents
 - Pesticides
- b. Applying pesticides only when vectors are present at a level that will constitute a nuisance or threat to public health**
- c. Using the least intrusive method of pesticide application.**
- d. Public education efforts to reduce potential vector breeding habitat.**
- e. Applying a decision matrix concept to the choice of the most appropriate formulation.**

This describes the District's existing integrated vector management (IVM) program, as well as the practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California that are used by this agency.

3. Correct Use of Pesticides

Users of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the proper spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

- a. All errors in application and spills are reported to the proper authority.**
- b. Staff training in the proper application of pesticides and handling of spills.**

This is an existing practice of the District, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

E. Pesticide Application Log

The Discharger shall maintain a log for each pesticide application. The application log shall contain, at a minimum, the following information, when practical, for larvicide or adulticide applications:

- 1. Date of application;**
- 2. Location of the application and target areas (e.g., address, crossroads, or map coordinates);**
- 3. Name of applicator;**
- 4. The names of the water bodies treated if known/ named(i.e., canal, creek, lake, etc.);**
- 5. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the Discharger, and volume or mass of each component discharged;**

This is an existing practice of the District as required to comply with DPR regulations and our CDPH Cooperative Agreement requirements.

References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://westnile.ca.gov/resources.php>. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Shasta Mosquito and Vector Control District at (530) 365-3768.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://westnile.ca.gov/resources.php>. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Shasta Mosquito and Vector Control District at (530) 365-3768.

MVCAC NPDES Coalition Monitoring Plan. 2011. Currently being drafted.

Shasta Mosquito and Vector Control Best Management Practices. 2011 Copies may be requested by calling the Shasta Mosquito and Vector Control District at (530) 365-3768.